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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,079	11/28/2005	Philippe Guenebaud	P27755	2321
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EXAMINER ROBERTS, JESSICA M				
ART UNIT 2621		PAPER NUMBER		
NOTIFICATION DATE 05/29/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/533,079

Applicant(s)

GUENEBAUD, PHILIPPE

Examiner

JESSICA ROBERTS

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 11/28/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
 - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Drawings

The drawings are objected to because every element in fig. 2 is not identified with a reference number. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected because of the following informalities: Line 6 of the claim recites, "packets (MPEG2 by way of example)" ... "that are identifiable (by PID, by way of non-limiting example)". Line 7 of the claim recites, "input transport stream (TSin, by way of non-limiting example)". Line 10 of the claim recites "compressed digital stream

(of the video "bitmap" type, by way of non-limiting example)". Line 12-13 recites "designated for playing it (in MPEG2, by way of non-limiting example)". Line 14-15 recites "transport packets (MPEG2, by way of non-limiting example)". Line 16-17 recites "output Transport stream (TSout, by way of non-limiting example)". The uses of parenthesis in this instance are rejected for the following reasons. First, the use of parenthesis in a sentence is typically limited to the inclusion of unimportant or superfluous information and unimportant or superfluous information should not be recited in a patent claim with one exception. The MPEP, at paragraph 608.01(m) allows for the enclosure of reference numerals, corresponding to the figures, within parenthesis. However, in this case, the term "MPEG2 by way of example" is not a reference numeral. In addition, the terms "transport packet" and "MPEG2 by way of example" seem to be different ways of expressing the same concept. However, the two terms may have subtle differences in their meaning, and such subtle difference could cause confusion in the interpretation of the claim. It is suggested that applicant choose the most appropriate terms for inclusion in the claim, and delete the other. Examiner will not give weight to "(MPEG2 by way of example)" for purposes of examination. Appropriate correction/clarification is required for proper claim analysis.

Regarding **claim 2**, line 2 recites "...packet identifications (PIDs, by way of non-limiting example)". See the analysis

Regarding **claim 3**, line 7-9 recites ... "useful stream packets (while also keeping the initial packets that were used to generate the new stream but have become useless)... (PIDs, by way of non-limiting example)...".

Regarding **claim 7**, line 4-6 recites ... "into a removable peripheral (including but not limited to a PCMA module compatible with the DVB-CI CENELEC EN50221 standard, or the OpenCable POD standard, a removable USB port or parallel Port, an Ethernet extension, etc...)" It is unclear to the Examiner if Applicant intends for the recitation inside of the parenthesis as part of the claim language. As best understood by the Examiner, the recitation provided inside the parenthesis only describes a preferred example, and is not part of Applicants claim language.

3. Regarding claims 4-6 and 8, which fail to remedy the issue as stated above, thus claims 4-6 and 8 are too rejected for being indefinite.
4. The term "useful" in claims 1-3, and 5-6 is a relative term which renders the claim indefinite. The term "useful" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. How useful is "useful"? Without a firm grasp of what constitutes "useful", one cannot exactly extract the highly compressed "useful" stream, as stated in claim 1. Those of ordinary skill in the art may well reasonably disagree on the degree of "useful".
5. Correction or clarification on the record is required for proper claim interpretation.
6. Claims 2-8 fail to remedy the issue stated above, thus claims 2-8 are too rejected as being indefinite. Correction or clarification on the record is required for proper claim interpretation.

7. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
8. Claim 2 recites the limitation "said receiver" on page 3 line 1. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 3 recites the limitation "said receiver" on page 3 line 6. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 4 recites the limitation "the selected program" on page 3 line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al., EP-1,111,796 A1.

Regarding **claim 1**, Kato teaches a Device enabling the on-the-fly conversion of a low bandwidth digital audiovisual stream, which is highly compressed for transport purposes, into a less compressed digital audiovisual stream, in order to adapt it to existing equipments designated to play the same, characterized in that it successively: extracts the "highly compressed" useful stream encapsulated in transport packets

((0037)) (MPEG2, by way of non-limiting example) that are identifiable (by PID, by way of non-limiting example), from an input transport stream ((0035) and fig. 2) (TSin, by way of non-limiting example), decompresses said useful stream into a less-compressed or non-compressed digital stream (the code converter 12 decodes the encoded video signal ((0039)) of the video "bitmap" type, by way of non-limiting example), re-compresses sufficiently the new less-compressed or non-compressed digital stream in a format that is known to the equipment designated for playing it ((0040)) (in MPEG2, by way of non-limiting example) re-encapsulates the new resulting stream in transport packets (Under the control of the controller 19, the TS packet generator 15 packetizes the encoded video signal supplied from the MPEG video encoder 14 to generate a video TS packet VTSP' and delivers it an input terminal a of the switch 16, ((0040) and figs. 3 and 5; element 15) (MPEG2, by way of non-limiting example) re-injects said packets in the output Transport stream ((0040)) (TSout, by way of non-limiting example), taking care not to desynchronize the video and the audio ((0040)).

Regarding **claim 2**, Kato teaches the Device according to claim 1, characterized in that said re-compressed and re-encapsulated packets (figs. 1 and 4) which are re-injected by multiplexing into the Transport stream return to said receiver in lieu of the initial useful stream packets, possibly with the same packet identifications (PIDs, by way of non-limiting example), then modifying the output stream bandwidth (fig. 1 element 6).

Regarding **claim 5**, Kato teaches the Device enabling the use of the conventional functions of a digital video recorder ((0045-0046), [fig. 4), by being capable of

temporarily or permanently storing all or the useful portion of the "highly compressed" initial stream in a local or remote memory (fig. 4 element 25) (17) , in order to replay it at the user's request ([0083]), characterized in that it implements the device according to claim 1, for its decompression (fig. 4 element 13), re-compression in a known format (fig. 4 element 14), re-encapsulation (fig. 4 element 15) and, finally, re-injection in the output transport stream (fig. 2 element TS'OUT).

Regarding **claim 7**, Kato teaches the Device according to claim 1, characterized in that it is integrated, entirely or partially, into a removable peripheral ([0079] and fig. 8A-8C) (including but not limited to a PCMCIA module compatible with the DVB-CI CENELEC EN50221 standard, or the OpenCable POD standard, a removable USB port or parallel Port, an Ethernet extension, etc. . . .).

Regarding **claim 8**, Kato teaches the Device according to claim 1, characterized in that it is integrated, entirely or partially, into existing equipment, in the form of component(s) or card(s) to be connected, in order to recreate a real transport stream capable of being played by the existing and especially standard means of said equipment ([0083] and fig. 8-9)

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claim is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al., EP-1,111,796 A1 and in view of Knee et al., US-2003/0185252.

Regarding **claim 3**, Kato teaches the Device according to claim 1, characterized in that said re-compressed and re-encapsulated packets (fig. 1, 3 and 4), which are re-injected by multiplexing into the Transport stream ([0010], [0017]), return to said receiver as a supplement to the initial useful stream packets (while also keeping the initial packets that were used to generate the new stream but which have become useless), with other packet identifications (PIDs, by way of non-limiting example).

Kato is silent in regards to return to said receiver as a supplement to the initial useful stream packets (while also keeping the initial packets that were used to generate

the new stream but which have become useless), with other packet identifications (PIDs, by way of non-limiting example).

However, Knee teaches to return to said receiver as a supplement to the initial useful stream packets (while also keeping the initial packets that were used to generate the new stream but which have become useless), with other packet identifications (PIDs, by way of non-limiting example) ([0019], [0020] and fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Knee with Kato for providing improving picture quality.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al., EP-1,111,796 in view of Gendel et al., US-2003/0099297.

Regarding **claim 4**, Kato is silent in regards to the Device according to claim 1, characterized in that it filters and simply eliminates some of the audio/video packets of the initial input Transport stream, identified as not being related to the viewing or the listening of the selected program in progress, in order to "create space" in the output Transport stream.

However, Gendel teaches the device according to claim 1, characterized in that it filters and simply eliminates some of the audio/video packets of the initial input Transport stream, identified as not being related to the viewing or listening of the selected program in progress, in order to "create space" in the output Transport stream (Gendel teaches where fig. 3 is a flow diagram of a method implemented by block 120 (PES packet filtering) of FIG.1B, according to an illustrative embodiment of the present

invention, [0035]. At step 340, any non-relevant packets are identified from the transport packets, such as packets with PID values that not used by transcoder, and discarded, [0036] and fig. 3 element 340).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Gendel with Kato for improved methods of transcoding.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al., EP-1,111,796 in view of Young et al., US-5,923,642A.

Regarding **claim 6**, Kato is silent in regards to the Device, characterized in that it performs the function of descrambling the useful stream before carrying out its main function of adapting the output transport stream, according to claim 1.

However, Young teaches the function of descrambling the useful stream before carrying out its main function of adapting the output transport stream, according to claim 1 (Fig. 3 shows an alternative embodiment of a transcoder located in the receiving earth station. The satellite signal for transmission via satellite maybe further include a satellite decrypter 70 which decrypts or unscrambles the satellite signal after demodulation and FEC-decoding, column 7 line 1-7 and fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Young with Kato for providing improved transcoding.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is (571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/Jessica Roberts/
Examiner, Art Unit 2621

